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09/314,001	05/19/1999	LJUDMILA GRIGORIEVNA ASLANOVA	33611YW002	4566

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EXAMINER	
HOFFMANN, JOHN M	
ART UNIT	**PAPER NUMBER**
1731	

DATE MAILED: 12/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/314,001	ASLANOVA, LJUDMILA GRIGORIEVNA	
	Examiner	Art Unit	
	John Hoffmann	1731	

-- The MAILING DATE of this communication appears on the cover sh t with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2003 and 05 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-7 and 22-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *32, 2-7 and 22-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-7 and 22-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "basalt" is indefinite to the point that of ordinary skill could not understand what the claims cover. First note page 1, lines 14-17 indicates that basalts can be 90% oxides of iron and titanium or 80 % oxides of aluminum and silicon. However, compared to the Van Nostrand's defintion which states ther eis a preponderance of calcic plagioclase feldspars and pyroxene. Clearly the two compositions that applicant indicates as "basalt" - are contrary to the Van Nostrand definition. One of ordinary skill would be at a complete loss as to what is covered and what is not covered by "basalt".

Claim Rejections - 35 USC § 103

Claims 32, 2-7 and 22-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Austin 4149866 in view of Naber 4940478 and Tsai 4816056.

Austin discloses the composition of the invention and the use of basalt: see col. 2, line 48- col.3, line17. However, Austin does not go into much detail as to how the

melt is created. Although Austin does not mention the ratios, they are inherently met by at least one of the specific compositions disclosed by Austin.

Naber teaches that it is desirable to preheat basalt when making fibers: col. 1, lines 6-8 and 31-34. This is to save energy/money: col. 2, lines 19-23. It would have been obvious to practice the Austin invention by using preheat of the basalt as taught by Naber for the reasons of Naber.

Austin does not discuss how the basalt material is melted. Tsai discloses an improved method for making glass and glass-like material (col. 1, lines 15-17; col. 1, line 65 to col. 2, line 51, col. 4, line32-40, col. 5, lines 66-68, and figures 2-3). The Austin material is clearly a "glass-like" material., for example, see Applicant's own specification.

It would have been obvious to use the Tsai melting method/apparatus for the melting operation of Austin, for the advantages of Tsai. Tsai demonstrates that the stabilizing structure/effects that Applicant invented has been previously invented.

Alternatively, Tsai teaches method of making glass. Austin teaches that Basalt is "readily available" and an "inexahustable natural resource" (col. 3, lines18-26) that produces fibers of "substantial industrial values". It would have been obvious to use the Austin material in the Tsai invention because the raw material is inexhaustible and creates industrial value. It would have been further obvious to preheat the raw material as taught be Naber for the advantages of Naber.

Claim 3: it would have been an obvious matter of routine experimentation to determine the optimal glass temperature. Clearly, if the glass was near of below the melting temperature it would have been too fluid - water-like to draw a fiber therefrom.

Claim 5: See table 3: it would have been obvious that the feeder would be at a temperature of the claimed range.

Claims 2, 6 and 4: See col. 7, line 11 of Naber. It is clearl that the basalt would be heated to at least one temerpature within the claimed range for at least one portion of the process.

Claim 7: see how claim 3 is addressed.

Claims 22-24 are clearly met.

Claims 25-26: Although Tsai's figure 2 may not be drawn to scale, it reasonably suggests a ratio that is similar as to what is claimed. Furthermore, below features 15, there are various steps. One can pick and choose two steps so that one is the stabilization height and another is the firing space height - and then arbitrialy designate one portion as the firing space chamber and the rest as the stabilizing chamber.

Alternatively, it would have been an obvious matter of routine experimentation to determine the height - Tsai discloses that the height in the waist is a result effective variable. Tsai further discloses that the height is relevant in the waist/stabilizing region, for the same reason Applicant does. One would expect that similar ratios would be needed.

Claims 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Austin 4149866 in view of Naber 4940478, Tsai 4816056 and Applicant's Prior art

Teaching (hereinafter "PAT") on page 2, lines 6-11 of the specification. See how Austin, Naber and Tsai are applied above. The PAT discloses that it is known to feed melt from a furnace to a feeder and then pull fibers through spinnerets. Austin, Naber and Tsai do not disclose how the fiber is created, it would have been obvious to remove the glass from Tsai furnace by using a port, because the glass must be removed, and anything through which something is removed is a "port". Any structure between the port and the spinneret is deemed to be a feeder because it feeds glass from the furnace to the spinneret.

Claims 28: Although Tsai's figure 2 may not be drawn to scale, it reasonably suggests a ratio that is similar as to what is claimed. Furthermore, below features 15, there are various steps. One can pick and choose two steps so that one is the stabilization height and another is the firing space height - and then arbitrialy designate one portion as the firing space chamber and the rest as the stabilizing chamber.

Claim 29 is clearly met.

Claims 30-31: Using another PAT: such as the bottom of page 1, and page 7: basalt has various compositions because of inclusions. Thus one would expect the Austin basalts to also have different compositions.

Response to Arguments

Applicant's arguments filed 9-5-2003 have been fully considered but they are not persuasive.

It is argued that page 1 of the specification refers to the composition of inclusions in the basalt and do not describe basalt rock as a whole. Page 1 makes no mention of any "inclusion" or anything similar. Examiner does not see how an artisan could read page 1 as referring to inclusions. To "enrich" requires the addition or increase of an ingredient. There is no basis to interpret "enrich" as meaning "inclusion".

IT is argued that Austin's percentages pertain to raw materials, not the melt. No basis is given for this allegation. The plain reading of Austin shows that the Austin basalts are melted and drawn - there isn't much change in the percentages. Any change would not take it outside of the present claim language. More importantly, the claims do not require the actual creation of such a composition. Rather, there is only mention of the intention, "to obtain a glass mass having the composition". There is no requirement that the composition is actually created. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

AS to the arguments regarding using rocks from <u>any deposit</u>: this argument is not understood. First of all, there is no indication of any specific limitation in the claims which the prior art does not provide for (or is obvious). Second, it is clear that one can use <u>any deposit</u> that has a composition that Austin has.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

It is further argued that Tsai does not have sand grains which remain on the bottom of the furnace and periodically discharged. The relevance of this is not understood because the claims do not require this. And the argument that basalt mass remains in the stabilizing section and feeder until it is ready to be formed in the fiber is not understood because the claims do not require such. Furthermore, the glass in the prior art combination would have to stay in one of those places, because there is no where else to go. Furthermore, it seems that the process is a continuous process, the glass is always flowing, it never stays in any location of any significant period of time. Perhaps there is a difference in speed of the glass as it flows, but since the claims to not meaningfully limit the claims to particular residence times, velocity or the like, Examiner cannot see any patentable difference.

It is further argued that the prior art does not have the claimed temperature values. The only example given in the argument is claim 27: This is taught in col.6, lines33-37 of Tsai, which teaches the temperature drops by 200 to 500 F degrees.

It is still further argued that the multiple heating systems to achieve improved temperature control of claim 22 is not disclosed in the prior art. Claim 22 does not require any improved temperature control, therefore, the prior art need not disclose it.

The heating means themselves are clearly taught in Tsai for example: col.4, lines 26-40 which indicates that each section is open to having a provision for heating (i.e. a heating means).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-372-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

12-2-03

John Hoffmann
Primary Examiner
Art Unit 1731

jmh
December 2, 2003